Miscellaneous.

"Can the striated upper-lip have anything to do with the noise ? for certainly, when *Corixa* chirped, it seemed to move rapidly its fore-feet across its forehead; but in the other noise it moved its body from side to side. The head seems to be nearly hollow, and the thorax is so different from other insects, a pin can be easily introduced under it. There are queer little plaits on the under-surface of *Corixa*.

"The grinding sound may be imitated by blowing the breath against the closed teeth, gently shaking the head while doing so.

"When one of the *Corixæ* died, the contents of its body were speedily sucked out by one of its companions.—In August 1844 had some alive, but could not hear any noise from them."

ON THE HABITS OF DISPOTEA-CUP AND SAUCER LIMPETS.

I have recently received from my nephew, Lieut. William Smith of H.M.S. Carysfort, a collection of specimens of *Dispotea*, which show the great changes that shell undergoes according to the form and the position of the body to which it happens to be attached.

No. 1. The most remarkable specimen is more than an inch and a quarter in diameter, which was attached to the inner surface of one of the valves of a *Venus* shell; it is of a white colour with oblique purple-brown rays; the three rays nearest the internal cup are the broadest; the apex is nearly central, slightly twisted from right to left, and not more than five lines high. The darkest rays are towards the umbo of the shell; its surface is covered with distant short tubular spines.

No. 2. is a flat specimen, very like the former, but rather darker and with similar brown rays: the shell is covered with minute, rather crowded spines, but it has had its margin broken, and the part which has been reproduced round the edge to repair the injury is thinner, less convex, and without any spines.

No. 3. is a specimen which was attached to a *Cardium*; it is dark brown, rather thick, very minutely spinulose, much higher than wide at the base, where it is compressed; on the side opposite to the internal appendage are diverging cross-ridges formed by the adaptation of the margin of the shell as it was enlarged to the ribbed surface of the *Cardium*.

No. 4. is very similar to the preceding, and is attached to the outside of one valve of a *Cardita*; it is equally thick, dark brown, and the surface closely spinulose, but the shell is not so much modified by the ribs of the *Cardita*, which only leave marks on the side near the internal appendage; but then the animal, just within the margin of the shell, has removed the ribs from the surface of the bivalve, leaving a white concave ring the shape of the *Dispotea*. It is to be remarked, that in this shell and the variety next to be described, the animal has affixed itself, so that the edge of its shell is quite close to the lower or ventral edge of the bivalve. The greater part of the side of this *Dispotea*, next to the lower side of the bivalve, is occupied by a smaller *Dispotea*, similar in thickness, colour and surface, considering its size, to the one on which it is attached, but of a nearly regular, convex, conical form and nearly central tip. The animal of this shell has dissolved a space on the surface of the other *Dispotea* of the size of the edge of the aperture of its shell.

No. 5. is a *Cardita* with a *Dispotea* on each of its values placed as in specimen No. 4, that is, with one of the edges of the shell close on the lower edge of the bivalue; and there is a single value of the same species of *Cardita* with another *Dispotea* in a similar situation.

It is to be observed, that under each of these shells, instead of the animal having eaten, or rather dissolved away part of the surface of the bivalve so as to form a smoother surface, each of the animals has deposited on their supporter a circumscribed layer of rather transparent hard calcareous matter of the exact size and form of the mouth of the shell, which fills up the greater part of the space between the ribs and forms an even and smooth base, and in one case it covers over some Serpulæ and other bodies which were attached to the bivalve. I cannot find any indication of a muscular scar on this deposit. These Dispoteæ have a thick pale brown shell, darker towards the upper part of the cavity; the outer surface is covered with thick, irregular, radiating, flattish-topped ribs, crossed by irregular concentric ridges, having oblong or linear intervening nets, and the surface of one of the specimens is marked with some irregular cross-ridges caused by the inequalities of the shell. In one of the Dispoteæ the internal appendage or back of the shell is near the lower edge of the bivalve, and the other has it near the umbo.

I believe that the whole of these specimens belong to a single species (No. 1 to 4 is *D. tubifera*, Say, and No. 5 is *D. rugosa*, Lesson), but it is curious to observe, that when within the cavity of another shell, it is white, low, and the animal did not dissolve any part of the surface to which it was attached; that when on the outer surface of the shell, it is high, thick, dark brown, and in some cases it absorbs the surface to which it is attached; and at others that it deposits a layer on the surface of the shell to which it is affixed, of the size of the margin of the shell itself. I may observe that generic characters have been formed on less variations in habit and less characters.

In the same collection are two specimens of *Pecten* with two *Crepidula* on each : they have modified the form of the surface of each shell, and the animals have absorbed a very thin layer from the surface of each part of the shell to which they are attached.—J. E. GRAY.

On the Embryology of Actaon. By M. VOGT*.

The embryology of the Actaon has been the principal object of my researches; I have seen the coupling of this interesting little mollusk, I have been present at the laying of the eggs, which takes place during some hours after the coitus, and I have thus had an opportunity of following, from hour to hour, up to the present day, the changes which the egg undergoes during a month. I have thus been able to ascertain that the separation of the vitellus is complete in this species, and that the division into eight parts offers a very

* Extract of a letter addressed to M. Milne Edwards. Ann. & Mag. N. Hist. Vol. xvii. L